

**REMARKS**

Reconsideration of the present application, as amended, is respectfully requested.

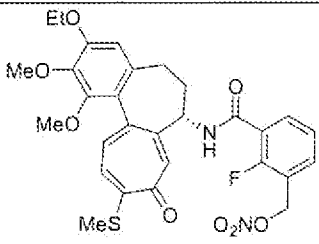
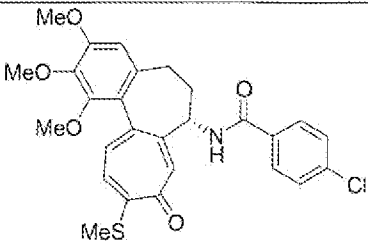
**A. STATUS OF THE CLAIMS**

As result of the present amendment, claims 12-21 remain in the case for continued prosecution.

Claims 1, 3, and 5-11 have been newly canceled without prejudice. The subject matters in claims 1-11 have been rearranged in new claims 12-21. For the purpose of facilitating prosecution and for the Examiner's convenience, the support for claim 12-21, for example, is listed in the table below.

New Claim No.	Previous claim No. for support
12	1 and 7
13	8
14	9
15	10
16	11
17	3
18 and 20	5
19 and 21	6

New claim 12 no longer reads on the second elected species (CAS# 147980-73-0) but reads on the first elected species, "Compound 8" having the following chemical formula. The second elected species (CAS# 147980-73-0) has been removed from claim 12 to overcome the rejections.

First elected species	Second elected species
	
<b>Compound 8</b>	<b>CAS#147950-73-0</b>

No new matter has been added.

#### **B. CLAIM REJECTIONS UNDER 35 USC §112, SECOND PARAGRAPH**

At page 4 of the Office Action, claims 5-6 and 8-11 are rejected as allegedly being indefinite for being dependent from the withdrawn claim 1. Claims are canceled and thus, the rejection is rendered moot.

Nevertheless, the corresponding claims 13-16 and 18-19 correctly depend from claim 12 which properly encompass the first elected specie, "Compound 8." corresponding to the following structure and designate as compound 8 in the application.

For all of the amendments and reasons above, reconsideration and withdrawal of this ground of rejections is respectfully requested.

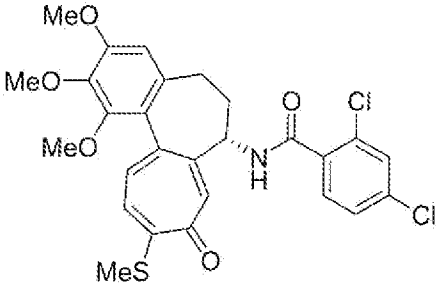
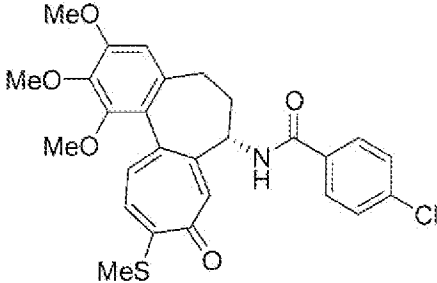
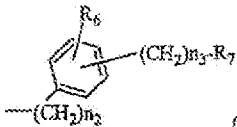
#### **C. CLAIM REJECTIONS UNDER 35 USC §103(a)**

At pages 5-10 of the Office Action, the Examiner has rejected claims 5-11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Guan et al. (*J. Med. Chem.* (1988) 41:1956-1961.). The Examiner has taken the position that, more specifically, Formula 1 in claim 7 encompasses a compound ("Compound A" herein), which is obvious over Guan et al. The Examiner indicated that Guan et al. teach 4-chloro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-benzamide ("Compound B" herein, CAS # 147950-73-0), compound 21 in Scheme I on page 1958 of Guan et al.

Applicants respectfully traverse.

Claims 5-11 have been canceled and thus, the rejections are rendered moot.

Nevertheless, the corresponding claim 12 which contains a similar subject matter as was included in previous claim 7 does not read on "Compound A," and thus, is not obvious over Guan et al. The Formula 1 in new claim 12 encompasses a tricyclic derivative wherein  $n_3$  is an integer of 1-5. Thus, the Formula 1 in claim 12, as amended herein, does not read on "Compound A" by having  $n_3 = 1-5$  and  $n_3 \neq 0$ , and thus, the compounds represented by the Formula 1 in claim 12 are not obvious over "Compound B" as taught by Guan, et al., as shown in the table below.

"Compound A", from the instant claim 7	"Compound B" CAS#147950-73-0 from Guan et al.
	
<p>The formula 1 in the instant claim 12 does not encompass Compound A, thus, not obvious over Guan et al.</p>	<p>Formula 1 of instant claim 12, wherein  <math>R_1 = \text{NHC(O)-p-Cl-Ph}</math>; <math>R_2 = R_3 = \text{CH}_3</math>; <math>R_4 = -\text{SCH}_3</math> <math>X = \text{O}</math>, thus,  <math>R_1 = -T_1-B_1</math>, <math>T_1 = -N(R_5)C(X_2)</math>, <math>R_5 = \text{H}</math>, <math>X_2 = \text{O}</math>;</p> <div style="text-align: center;">  <p>(a)</p> </div> <p><math>B_1 = \text{para-chlorophenyl} =</math>  <math>n_2 = 0</math>, <math>R_6 = \text{H}</math>; <math>n_3 = 0</math>; <math>R_7 = \text{halogen (Cl)}</math>.</p>

On pages 9-10 of the Office Action, claims 5-6 are rejected as further limiting claim 7. The Examiner indicated that Guan et al. teach that compound B and its analogues are pharmacologically active compounds. Applicants respectfully disagree. Claims 5-6 have been canceled and thus, the rejections are rendered moot. Nevertheless, new claims 18-21, as

amended herein, depend from claim 12 or 17, which claim compound of Formula 1 having multiple substituent on the aromatic moiety of structures (a), (b), (f), and (g) of Formula 1, and especially having  $\text{ONO}_2$ ,  $\text{SNO}$ , or  $\text{SNO}_2$  containing moieties, which Guan et al. do not teach, suggest, or motivate. Guan et al. teach synthesis and biological evaluation of tridemethylthiocolchicine analogues which do not have  $\text{ONO}_2$ ,  $\text{SNO}$ , or  $\text{SNO}_2$  containing moieties. Thus, claims 18-21 would not be obvious over Guan et al. as they further limit claim 12, which is not obvious over Guan et al.

For all of the amendments and reasons above, reconsideration and withdrawal of this ground of rejection is respectfully requested.

**D. ALLOWABLE SUBJECT MATTER**

On page 10, the Examiner indicated that claim 3 would be allowable if amended to remove the non-elected subject matter. Applicants respectfully traverse.

Applicants also respectfully urged that the Examiner provides a scope of "elected species" more than the first and second selected species for search, in respect to the elements of compounds, such as  $R_1$ ,  $R_2$ ,  $T_1$ - $B_1$ , etc. instead of two structures elected for search.

For all of the amendments and reasons above, reconsideration and withdrawal of this ground of objection is respectfully requested.

**E. FEES**

This response is being filed within the shortened period for response with a Request for Continued Examination and the required fee. The three month due for the response was a Saturday, August 29, 2009, thus, it is considered to be timely filed within three months. No further fees are believed to be due. If, on the other hand, it is determined that any further fees are due or any overpayment has been made, the Assistant Commissioner is hereby authorized to debit or credit such sum to Deposit Account No. 02-2275.

Pursuant to 37 C.F.R. 1.136(a)(3), please treat this and any concurrent or future reply in this application that requires a petition for an extension of time for its timely submission as

incorporating a petition for extension of time for the appropriate length of time. The fee associated therewith is to be charged to Deposit Account No. 02-2275.

An early and favorable action on the merits is earnestly solicited.

**F. CONCLUSION**


In view of the actions taken and arguments presented, it is respectfully submitted that each and every one of the matters raised by the Examiner have been addressed by the present amendment and that the present application is now in condition for allowance.

An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

LUCAS & MERCANTI, LLP

By: \_\_\_\_\_



Yun H. Choe  
Registration No. 61,798

LUCAS & MERCANTI, LLP  
475 Park Avenue South  
New York, New York 10016  
Phone: 212-661-8000  
Fax: 212-661-8002